## Abstract of the Disclosure

An apparatus and method for profiling candidate reuse regions and candidate load instructions aids in the selection of computation reuse regions and computation reuse instructions with good reuse qualities. Registers holding input values for candidate reuse regions are sampled periodically when the candidate reuse region is

5   encountered. The register contents are combined into set-values. When a relatively small number of set-values account for a large percentage of occurrences, the candidate reuse region may be a good computation reuse region. Load instructions are profiled for the location accessed and the value loaded. The location and value are combined into location-values. The relative occurrence frequency of location-

10  values can be used to evaluate load instructions as candidate instructions for reuse.